

## 6. Powers and roots

### ACTIVITY 1

We plant 7 plants in a field. Each plant produces 7 plants a month. How many plants will we have 4 months later?

### ACTIVITY 2

#### BODY MASS INDEX (BMI) FOR CHILDREN AND ADOLESCENT

This calculator measures body mass index (BMI), which is a measure of body fat. The calculator can be used for anyone from two to twenty years of age.



### PLEASE NOTE:

Always see your doctor if you are concerned about your child's growth.

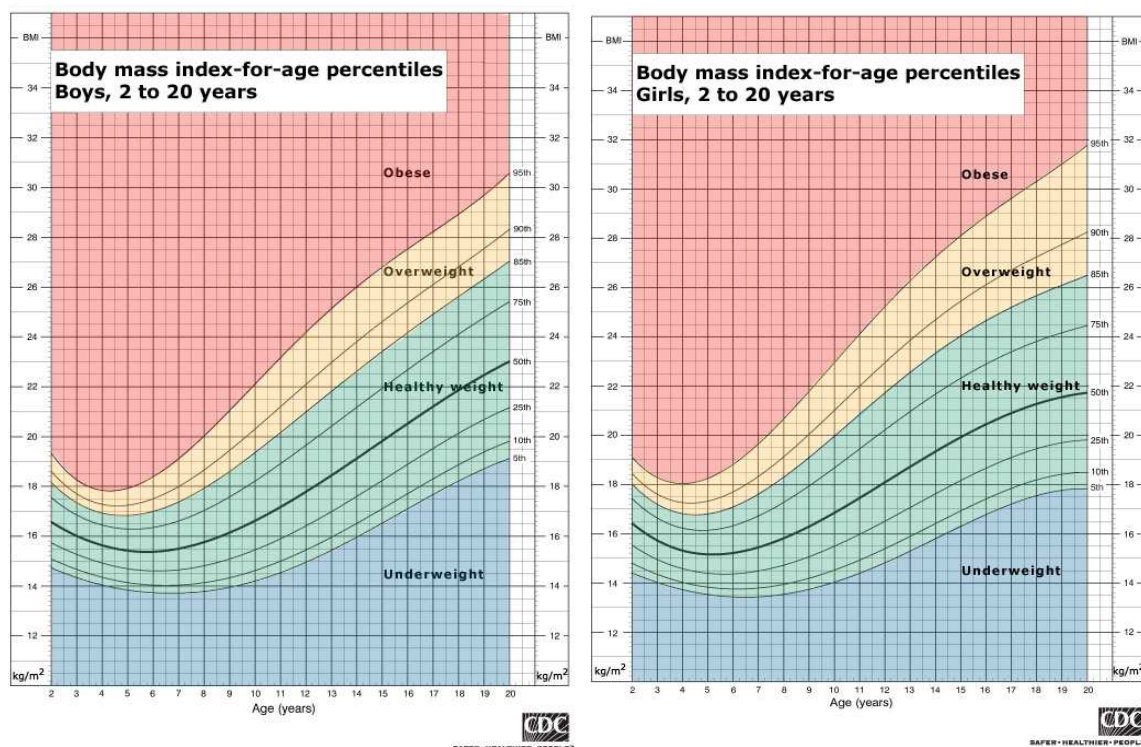
The BMI is used to measure whether a person is underweight, normal weight, overweight or obese.

As children grow, their amount of body fat changes and so will their BMI. That's why a BMI calculation for a child or adolescent must take into account their age and gender (we do this using percentile charts).

The formula to calculate the BMI is:

$$\text{Body Mass Index} = \text{BMI} = \frac{\text{weight (kg)}}{\text{height}^2 (\text{m}^2)}$$

Your situation is determined by the following charts:



You can see this chart on the website:

<http://www.betterhealth.vic.gov.au/bhcv2/bhcsite.nsf/pages/bmi4child>

## **SOURCE**

Based on graphs developed by the National Health Center for Statistics in collaboration with the National Centre for Chronic Disease Prevention and Health Promotion (2000).

You can complete the information about the BMI on the website:

[http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Body\\_Mass\\_Index\\_\(BMI\)](http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Body_Mass_Index_(BMI))

What is the BMI for a female who weighs 45 kg and is 1'60m high?

This girl is 15. How is her weight as the chart?

A girl 1'60 m high and 13 years old, how much would be her weight to have a normal weight?